



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,114	11/21/2003	Charles Robert Kenley		1113

39094 7590 09/19/2007
KENLEY CONSULTING, LLC
916 IVY CREEK COVE
FORT WAYNE, IN 46804-3582

EXAMINER

VIZVARY, GERALD C

ART UNIT	PAPER NUMBER
----------	--------------

3609

MAIL DATE	DELIVERY MODE
-----------	---------------

09/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/707,114

Applicant(s)

KENLEY, CHARLES ROBERT

Examiner

Gerald C. Vizvary

Art Unit

3609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 & 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 & 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

KHOI H. TRAN
SUPERVISORY PATENT EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Examiner's Note

1. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

Claim Objections

2. Claims 1 & 2 are not in compliance with the format CFR 37 §1.175(f) "If there are several claims, they shall be numbered consecutively in Arabic numerals." Appropriate action is required.

Art Unit: 3609

3. Claim 2 is objected to because of the following informalities: "Eqn." should be written as a complete word to remove. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Independent claim 1 recites the limitations, "forecasts returns on stocks, bonds, treasury bills and inflation rates". These limitations are representative of steps that may be performed without being repeatable or predictable, thus raising the issue of abstract ideas that require undue experimentation for the invention to be performed. Since the scope of the claims, as determined by the Specification, do not have a clear objective standard to be applied to produce repeatable and predictable results nor are the results in a real-world form, one skilled in the art would have to conduct undue experimentation in order to perform the invention. Therefore, claims 1 & 2 are considered as failing to comply with the enablement requirement.

6. Claims 1 & 2 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. Steps critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure.

See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Art Unit: 3609

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claim 2 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: distinctly claiming how the equations are to be implemented in a way that will give the claimed utility.

9. Claim 2 recites the limitations "Eqn. (15) and Eqn. (14) in lines 2 and 5.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)). In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result,

Art Unit: 3609

i.e., the claim must be more than a mere abstraction (*Benson*, 409 U.S. at 71-72, 175 USPQ at 676-77). Additionally, a claim may not preempt abstract ideas, laws of nature or natural phenomena nor may a claim preempt every “substantial practical application” of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions themselves (*Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972)). (Please refer to the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” for further explanation of the statutory requirement of 35 U.S.C. § 101.).

11. Claims 1 & 2 also fail to produce a concrete result. Claims 1 & 2 recite the steps of “forecasting”, which are mere abstract ideas that do not produce concrete results. A concrete result cannot be achieved unless the recited steps are repeatable and predictable. The results of these steps will not produce concrete real-world results since there is no evidence that these steps, when repeated, will produce substantially the same result. The scope of these limitations, as defined by pages 5, 6 & 7 of the Specification, are defined as “developing a forecast”. The steps of “forecasting” have not been defined to include a clear objective standard that will be repeatable and produce predictable results. Because the results produced by this step are not concrete, claims 1 & 2 are considered to be directed toward non-statutory subject matter.

Art Unit: 3609

12. Claim 2 merely recites the manipulation of an abstract idea and fails to produce a tangible result. Claim 2 recites “applying Eqn. (12) and applying Eqn. (14)”, which is a mere abstract idea that does not produce real-world results, and thus not a tangible result. The result of “applying an equation” is not a real-world tangible result. Because the results produced by these steps are not tangible, claim 2 is considered to be directed toward non-statutory subject matter.

13. Claim 2 are directed toward a mathematical algorithm *per se*. There is no practical application of the algorithm, thereby rendering the claimed invention an abstract idea *per se* (which is non-statutory under § 101). Consequently, the claims fail to produce a result that is useful, concrete, and tangible. Additionally, the values, equations, and thresholds are so broadly defined that it is not clear how they specifically relate to inflation mean value for year t . The claims are so broadly and abstractly written that they attempt to preempt every “substantial practical application” of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions themselves, which is prohibited under § 101.

14. The claimed invention is directed to non-statutory subject matter. Mathematical formulas are non-statutory subject matter. Claims 1 & 2 are directed to mental processes, which can be performed manually.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1 & 2 are rejected under 35 U.S.C. 102(b) as being anticipated by 1980 Lewis, Alan L. et al. The Ibbotson-Sinquefield Simulation Made Easy

Journal of Business, vol. 53, no. 2 University of Chicago.

<<http://www.jstor.org/view/00219398/di993821/99p0508t/0>>

As for claim 1, Lewis, Alan L. et al (The Ibbotson-Sinquefield Simulation Made Easy Journal of Business, vol. 53, no. 2 University of Chicago p. 206) teach a method that forecasts returns on stocks, bonds, treasury bills, and inflation rates using current corporate bond yields. (“Ibbotson and Sinquefield consider returns on common stocks, Treasury bills, long-term government bonds and corporate bonds. They also measure the inflation rate in terms of changes in the Consumer Price Index.”)

As for claim 2, (1980 Lewis, Alan L. et al. The Ibbotson-Sinquefield Simulation Made Easy Journal of Business, vol. 53, no. 2 University of Chicago) teaches a

Art Unit: 3609

method according to claim 1, that forecasts the inflation mean value for year t by applying Eqn. (15) that uses as input the following values:

the corporate bond forward rate at year t derived from corporate bond yields by applying Eqn. (14),

the historical average default premium,

the historical average maturity premium, and

the real Treasury bill return mean value for year t .

Equation 14 is the same as equation 2 of the prior art with the corporate bond forward rate calculated from the market-based corporate bond yield in equation 14 replacing the government bond forward rate calculated from market-based government bond yield. Equation 15 is the same as equation 3 of the prior art with the government bond forward rate at time t replaced with the corporate bond forward rate at time t plus the historical average default premium.

Lewis, Alan L. et al The Ibbotson-Sinquefeld Simulation Made Easy Journal of Business, vol. 53, no. 2 University of Chicago p. 205 further teach the asset calculation using a historical risk premium ("The model predicts that a future stock return will be given by a historical risk premium, randomly drawn, added to an expected T-bill rate implied by the yield curve.")

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bekaert (US 6125355 A) shows a pricing module, which provides a single module that models both fixed-income securities and equity securities into the future in an arbitrage-free model. Because the modeling includes both fixed-income securities and equity securities that are modeled based on common input state variables and does not allow arbitrage conditions between the fixed-income securities and the equity securities (as well as no arbitrage within a security class), the invention provides an improved pricing module.

Slyke (Pub. No. 20020042770 A1) shows a liquid insurance contract (LIC) comprises a security which is traded or tradable and which has cash flows to the issuer based upon a liability whose exact value is unknown at the time of issuance and may include spinning off the underwriter from the parent company using at least one stock dividend, trading shares of the underwriter, reporting information on trades and positions of the underwriter, and valuing the underwriter using analytic modeling, sensitivity testing, portfolio analysis, and/or investment analysis.

Baker (US 6336103 B1) shows a method and system for correlating an expected asset return of a portfolio to changes in future financial liabilities and also to other

Art Unit: 3609

financial indices. Management of asset portfolios often requires precise matching of liability streams, such as is the insurance industry and for pension funds. The method selects the weight percentages of assets by achieving optimum statistical correlation between asset returns and liability returns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4268.

Art Unit: 3609

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerald Vizvary
Patent Examiner, A.U. 3609
September 6, 2007



KHOI H. TRAN
SUPERVISORY PATENT EXAMINER